

Application No.: 10/808,518
Reply dated April 27, 2006
Reply to Office Action of December 27, 2005
Page 10 of 18

Docket No.: 0425-1029PUS2

AMENDMENTS TO THE DRAWINGS

Attached hereto is one (1) replacement drawing sheet that complies with the provisions of 37 C.F.R. § 1.84. The replacement drawing sheet incorporates the following drawing changes:

In Fig. 3, a line extending from reference numeral 27 has been amended to extend to the circular stepped portion.

It is respectfully requested that the replacement drawing sheet be approved and made a part of the record of the above-identified application.

REMARKS

Claims 1-17 are pending in the application. Claims 8-11, 12/8, 13, and 15-16 have been withdrawn from consideration. New claim 17 has been added.

Restriction Requirement

In the Office Action dated July 19, 2005, the Examiner issued a restriction requirement between claims 1-12 and claim 13.

In the Reply filed on October 19, 2005, Applicants elected claims 1-12 without traverse.

In the Office Action dated December 27, 2005, the Examiner states that claims 8-11, 12/8, 13, and 15-16 have been withdrawn from consideration as being directed to the non-elected method for making an igniter.

More specifically, the Examiner states that claim 8, as amended (in the Reply filed on October 15, 2005), is directed to the non-elected method for making an igniter.

Applicants respectfully disagree because claim 8, as amended, was written in an apparatus claim form including a "wherein" clause, and recites substantially the same elements as those recited in the original claim 8.

The Examiner also states that claim 8 would also be restricted on the grounds of sub-combinations usable together in view of applicant's election of group I igniter assembly as described in claims 1 and 4.

The Examiner, however, has failed to show, "by way of example, that one of the subcombinations has utility other than in the disclosed invention" (see MPEP 806.05(d)).

In view of the foregoing, Applicants respectfully submit that this restriction is improper and should be withdrawn.

Further, claim 8 has been amended such that it is now clearly directed to an apparatus.

Substitute Specification

The Examiner has objected to the Substitute Specification filed on October 19, 2005 because it was not accompanied by a statement that it contains no new matter.

A new Substitute Specification containing the changes that were made in the substitute specification filed on October 19, 2005 as well as correction of a paragraph numbering error on page 1 and the correction of several typographical/grammatical errors in paragraphs [0004], [0013], and [0060] is submitted herewith. The Substitute Specification contains no new matter.

A new Comparison Specification showing the matter being added to and deleted from the original specification is also submitted herewith.

The Examiner is respectfully requested to approve and enter the Substitute Specification.

Drawing Changes

In Fig. 3, a line extending from reference numeral 27 has been amended to extend to the circular stepped portion so that it is consistent with the statements in the specification..

The Examiner is respectfully requested to approve and enter this drawing change.

Claim Rejections – 35 U.S.C. § 112

Claims 3-7 have been rejected under 35 U.S.C. § 112, second paragraph because of some informalities.

The rejected claims have been amended to overcome this rejection.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections – 35 U.S.C. § 102

(a) Claims 1-2, 4, 6, 12/1, 12/4, and 14 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Avetisian (USP 6,508,175). This rejection is respectfully requested.

Avetisian discloses, in Fig. 1, an initiator 2 including an igniter 8, a retainer 4 that surrounds the igniter 8 and including a flange 16 and a molding feature 24, and a non-conductive body 6 provided between the igniter 8 and the retainer 4.

In Avetisian, the molding feature 24 (corresponds to the “first protruding portion” recited in claim 1 of the present invention) has an inner surface that consists of two surfaces (a first surface that extends upward and a second surface that extends from an upper end of the first surface at approximately 45 degrees).

In contrast, in the claimed invention of the present application, “an entire inner surface of the first protruding portion” forms “only a single surface.”

Accordingly, Avetisian fails to disclose or suggest the “first protruding portion” as recited in claim 1.

Further, in Avetisian, the entire outer surface of the igniter is covered by the non-conductive body 6, and an outer surface of the non-conductive body 6 is covered by a cup 20. Such a structure is necessary to withstand the pressure inside the sealed gas unit 18 (see Abstract). Therefore, an output (i.e., an explosive force) of the igniter must be large enough to destroy the non-conductive body 6 as well as the cup 20.

In contrast, the claimed invention of the present application, "at least an upper portion of the igniter is not covered by the resin." Therefore, the igniter need not have an output (explosive force) large enough to destroy the resin. Therefore, a smaller igniter can be used.

Claims 2, 12/1, and 14, dependent on claim 1, are allowable at least for their dependency on claim 1.

Claim 4 is allowable at least for the similar reasons as stated in the foregoing with regard to claim 1.

Claims 6 and 12/4, dependent on claim 4, are allowable at least for their dependency on claim 4.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 1-2, 4, and 14 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Yabuta et al. (USP 6,508,175). This rejection is respectfully requested.

Yabuta discloses, in Fig. 2, an initiator assembly including an initiator 32, a metal collar 40 that surrounds the initiator 32 and having a circular portion (generally indicated by reference

numeral 41) extending from an upper end of the metal collar 40, and a resin portion 36 provided between the initiator 32 and the metal collar 40.

In Yabuta, an inner surface of the circular portion (41) (corresponds to the “first protruding portion” recited in claim 1 of the present application) has a first vertical surface that extends from the metal collar 40, a horizontal surface that extends radial inward from an upper end of the first vertical surface, and a third surface that extends vertically from an innermost end of the second surface.

In contrast, in the claimed invention of the present application, “an entire inner surface of the first protruding portion” forms “only a single surface.”

Accordingly, Yabuta fails to disclose or suggest the “first protruding portion” as recited in claim 1.

Further, as shown in Fig. 2 of in Yabuta, the peripheral surface 41 is not covered by the resin portion 36. Therefore, when the resin portion 36 shrinks after injection molding, a space or a gap may be formed between the metal collar 40 and the resin portion 36, and thus moisture may enter into the gap.

In contrast, in the claimed invention of the present application, “an outer surface of the cylindrical portion of the first protruding portion is covered by the resin.” Therefore, even if a similar gap is formed between the inner surface of the first protruding portion and the resin after injection molding, the resin covering the outer surface of the cylindrical portion of the first protruding portion prevents moisture from entering into the gap.

Claims 2 and 14, dependent on claim 1, are allowable at least for their dependency on claim 1.

Claim 4 is allowable at least for the similar reasons as stated in the foregoing with regard to claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections – 35 U.S.C. § 103

(a) Claims 3 and 7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Avetisian in view of Dietzel et al. (USP 3,960,083). This rejection is respectfully traversed.

Claim 3, dependent on claim 1, is allowable at least for its dependency on claim 1.

Claim 7, dependent on claim 4, is allowable at least for its dependency on claim 4.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Avetisian in view of Fogle Jr. (USP 5,691,498). This rejection is respectfully traversed.

Claim 5, dependent on claim 4, is allowable at least for its dependency on claim 4.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(c) Claim 3 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yabuta in view of Dietzel. This rejection is respectfully traversed.

Claim 3, dependent on claim 1, is allowable at least for its dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(d) Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yabuta in view of Fogle Jr.3. This rejection is respectfully traversed.

Claim 5, dependent on claim 4, is allowable at least for its dependency on claim 4.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(e) Claims 12/1 and 12/4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yabuta in view of Avetisian. This rejection is respectfully traversed.

Claim 12, dependent on claim 1, is allowable at least for its dependency on claim 1.

Claim 12, dependent on claim 4, is allowable at least for its dependency on claim 4.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

New Claim

Claim 17, dependent on claim 8, is allowable at least for its dependency on claim 8.

Upon reconsideration and withdrawal of restriction with regard to claim 8, the Examiner is respectfully requested to determine the patentability of claim 17.

A favorable determination by the Examiner and allowance of this claim is earnestly solicited.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.

Application No.: 10/808,518
Reply dated April 27, 2006
Reply to Office Action of December 27, 2005
Page 18 of 18

Docket No.: 0425-1029PUS2

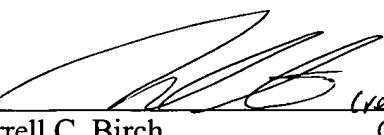
The Examiner is respectfully requested to enter this Reply After Final in that it raises no new issues. Alternatively, the Examiner is respectfully requested to enter this Reply After Final in that it places the application in better form for Appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi (#40,417) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: April 26, 2006

Respectfully submitted,

for By:  (reg. # 40,417)
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Attachment: One (1) Replacement Drawing Sheet - Fig. 3
Substitute Specification - 14 pages
Comparison Specification - 15 pages